

# **REVIEW AND COMMENT RECORD**

**1. Page 1 of 5**

**2. Date: March 29, 1993**

**3. Document No./Title:** Draft Final, Revision 3.0, Technical Memorandum 6: CPT and BAT Sampling Plan for the Original Landfill, OU 5, February, 1993

**Reviewing Person and/or Agency:** DOE-HQ

**Date:** March 18, 1993

Item	Old Section or Paragraph	Summary of Comment(s)	Disposition	Status
MAJOR CONCERN		Doubts the ability of CPT to go 30 feet. Refusal and health & safety problems in landfill? Review boring logs to assess this.	CPT has been successful elsewhere on plant site. EM and magnetometer data did not identify any significant buried objects. CPT requires less exposure than drilling. Logs of boreholes were reviewed which is how a "twinning" location was selected.	Done. PJJ
General comments				
1		Purposes of CPT and BAT sampling need restating.	Restated.	Done. PJJ
2		Purpose of vadose zone sampling is unclear.	Vadose zone sampling deleted.	Done. PJJ
3		Discuss DQOs and QA/QC issues.	Clarified.	Done. PJJ
Specific Comments				
1	Section 1.1, P. 1, first ¶	Restate purpose of CPT and BAT.	Restated.	Done. PJJ
2	Section 1.2, p. 2, third ¶	State what CPT will actually measure/record.	Stated and clarified.	Done. PJJ
3	Section 2.2.2, p. 8, second ¶	Is magnetic or EM data used to define landfill boundaries?	Restated to indicate that both are used.	Done. PJJ

ADMIN RECORD

A-OU05-000134

REVIEWED FOR CLASSIFICATION/UCNI	
BY	G. T. Ostdiek 872
DATE	3-31-93

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4	Section 2.3, p. 11, first ¶	Provide clarification of numbers of soil borings and CPT locations.	Numbers and locations clarified.	Done. PJJ
5	Section 3.0, p. 15, first ¶	Please clarify vadose zone sampling. State if K is going to be measured or not. Delete reference to BAT being used to assess off-site migration.	Deleted vadose sampling. Stated that K will NOT be measured. Purpose of groundwater samples clarified.	Done. PJJ
6	Section 3.1.1, p.15, second ¶	Expand on reasons for CPT locations and knowledge of groundwater flow directions. State that CPT locations will be measured from geophysical survey baseline.	Groundwater flows south southeast. Clarified how CPT locations will be located.	Done. PJJ
7	Section 3.3.3, p. 16, first ¶	Discuss reasons for 150 foot spacing.	Changed to 100 foot spacing.	Done. PJJ
8	Section 3.3.3, p. 16, second ¶	Defend CPT calibration locations.	CPT calibrations clarified and expanded on.	Done. PJJ
9	Section 3.1.2, p. 17, second ¶	Specify uses for CPT data and what will be collected.	Data and used specified.	Done. PJJ
10	Section 3.1.2, p. 18, fifth ¶	Please define when refusal will require abandoning a location, e.g. at a few feet from surface, and whether data from partially penetrating holes can be used.	Definitions presented.	Done. PJJ

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11	Section 3.1.3, p. 19, first ¶	Please discuss briefly how CPT sites will be located, i.e. surveyed or measured from some surveyed datum with a tape.	Measured from geophysical survey line.	Done. PJJ
12	Section 3.1.4, p. 19, second ¶	Are the CPT equipment calibrations and checks discussed here all there are, especially during actual equipment usage? Please clarify.	Clarified.	Done. PJJ
13	Section 3.1.4, p. 19, third ¶	Please explain the significance of the straightness and wobble checks on the CP push rods that are discussed here.	"Wobble" explained.	Done. PJJ
14	Section 3.1.4, p. 19, fourth ¶	Please explain the significance of the required offsets of CPT locations from existing CPT sites, boreholes or monitoring wells.	Clarified.	Done. PJJ
15	Section 3.2.1, p. 20, first ¶	Please discuss if offsets similar to those required for CPT holes are required for the BAT sampling.	Groundwater sampling offsets discussed.	Done. PJJ
16	Section 3.2 p. 20-23	Include at a minimum, proposed data quality level, QA/QC protocol, analytical methods, and data validation for BAT sampling.	EPA level specified.	Done. PJJ

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17	Section 3.2.2, p. 21, second ¶	The description of the sampling method in this paragraph is unclear. The paragraph appears to say the BAT equipment will be grouted into the borehole, which seems unlikely. Also, why must the sample be collected at later time?	Restated to clarify.	Done. PJJ
18	Section 3.2.3, p. 21-23: a)	Analytical methods and the type of analytical laboratory need to be specified. The section does not state but seems to imply that samples will be sent to an off-site laboratory. Please discuss if sample turnaround times will be fast enough to make the BAT data useful within the overall project schedule.	Samples will be sent off-site. Should not impact schedule.	Done. PJJ
18	Section 3.2.3, p. 21-23: b)	If the purpose of BAT sampling is to obtain screening level data to help in choosing locations for monitoring wells, it is unnecessary to analyze for the full suite of parameters as proposed in this section. Analyzing for the full suite will unnecessarily increase project costs and probably schedule. Suggest that analyzing for VOC, Gross Alpha and Gross Beta, metals and SVOC, in that order of preference, is adequate for screening.	Purpose restated.	Done. PJJ
18	Section 3.2.3, p. 21-23: c)	...Please discuss realistic estimates of sampling time.	Sampling time proposed should be sufficient. and so stated.	Done. PJJ

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19	Section 3.3, p. 23, second ¶	It is not clear that the SOP for heavy equipment decontamination would apply to downhole sampling equipment. Because of the specialized nature of the BAT equipment it would be useful to be more specific about decontamination procedures. Please expand this section to cover BAT sampling explicitly.	Decon procedures specified.	Done. PJJ